

THAT WHICH IS CLAIMED:

1. An isolated DNA molecule comprising a nucleotide sequence having at least 90% sequence identity to SEQ ID NO. 1, wherein said nucleotide sequence encodes a polypeptide having poly ADP-ribose polymerase activity, said polypeptide comprising at least two functional zinc fingers.
2. The isolated DNA molecule of claim 1, wherein said nucleotide sequence comprises the sequence set forth in SEQ ID NO. 5.
3. A chimeric nucleic acid sequence comprising a promoter capable of driving expression of a nucleic acid sequence in a plant cell operably linked to a nucleotide sequence of claim 1.
4. A vector comprising the chimeric nucleic acid sequence of claim 3.
5. A plant cell transformed with the chimeric nucleic acid sequence of claim 3.
6. A transformed plant comprising the chimeric nucleic acid sequence of claim 3.
7. The transformed plant of claim 6, wherein said plant is a dicot.
8. The transformed plant of claim 6, wherein said plant is a monocot.
9. The transformed plant of claim 8, wherein said monocot is maize.
10. A method for modulating the metabolic state of a plant cell, said method comprising transforming said plant with a DNA construct, said construct comprising a promoter that drives expression in a plant cell operably linked to a nucleotide sequence of claim 1.